

Article

Exploring Secondary School Teachers' Acceptance of Facebook in English Language Teaching: A TAM-Based Study in Ho Chi Minh City

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Abstract

This study explores the acceptance of English language teachers in Ho Chi Minh City regarding the integration of Facebook into their instructional practices. It focuses on how perceptions of usefulness and ease of use may influence their intention to adopt the platform for vocabulary and grammar instruction. Employing a mixed-methods approach, the research collected data from 150 teachers divided into two age groups (22–39 and 40+). Qualitative insights were gathered through semi-structured interviews grounded in the Technology Acceptance Model (TAM), followed by a quantitative survey measuring perceived usefulness, ease of use, satisfaction, attitude, and intention to use. The findings suggest that all hypothesized relationships within the TAM framework were statistically significant, with younger teachers exhibiting a stronger correlation between satisfaction and attitude, indicating potential generational differences in affective responses to technology. Both age groups acknowledged Facebook's pedagogical potential in fostering student engagement and collaborative learning, while also noting challenges such as distractions and time constraints. The study aims to contribute to teacher-centered research on educational technology adoption and offers preliminary implications for the development of age-sensitive training programs and supportive policy initiatives in language education.

Keywords

English language teaching, Facebook integration, secondary school teachers, teacher attitudes, Technology Acceptance Model (TAM)

1 Introduction

The advancement of digital technology has significantly transformed foreign language teaching and learning, with platforms like Facebook having a considerable influence. Boasting over 2.9 billion global users ([Statista, 2023](#)), Facebook has arguably evolved beyond a social networking site to become a potentially valuable educational tool, fostering more seamless interaction between educators and

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learners. Recent research suggests that it may enhance student engagement, facilitate communication, and create dynamic, informal learning environments (e.g., [Faryadi, 2017](#); [Muftah, 2022](#); [Rodliyah, 2016](#)). This trend underscores a critical need for TESOL research to engage with the multimodal turn, as communication increasingly integrates diverse semiotic resources, like images, sound, and spatial design, alongside language ([Lim, 2025](#)).

In language education, Facebook appears to offer distinct advantages, especially in supporting teacher–student interaction. According to Vygotsky’s (1978) sociocultural theory, meaningful interaction is considered vital for language acquisition. Features such as group discussions, comment threads, and messaging can enable students to practice writing and engage in dialogue. Blattner and Fiori (2009) indicate that Facebook groups may encourage freer self-expression and improve English proficiency. Moreover, Facebook seems to create a relatively relaxed, supportive environment that can enhance participation and learner confidence ([Kabilan et al., 2010](#)). Its multimedia tools are likely to make lessons more engaging and accessible ([Manca & Ranieri, 2016](#)). Facebook may also promote collaboration, enabling students to complete tasks, share resources, and solve problems beyond the classroom ([Rabongue et al., 2024](#)), which could help develop communication and critical thinking skills. Beyond formal education, Facebook serves as a rich source of English learning content. Pages such as BBC Learning English, TED-Ed, and various language learning groups give students access to authentic language use. By engaging with posts and joining discussions, they can broaden their vocabulary and sharpen analytical skills ([Jumaat et al., 2019](#)). In addition, some students connect with native speakers through Facebook, gaining chances for more natural practice and meaningful cultural exchange ([Barrot, 2018](#)).

Despite its potential benefits, Facebook also brings a number of challenges for teachers and learners. A common difficulty is maintaining focus on educational tasks. Given the platform’s open and diverse environment, students are easily distracted by non-academic content, including entertainment, advertisements, or unverified news sources. Without proper guidance, many may find it difficult to stay on track ([Feng et al., 2019](#)). The platform’s emphasis on entertainment and social interaction can further undermine self-discipline, prompting students to spend more time scrolling or chatting rather than studying ([Yunus et al., 2012](#)). Concerns about privacy and security also persist. Some students hesitate to take part in public online learning activities due to fears of being judged or receiving unwanted attention. Activities such as posting, commenting, or participating in discussions may generate anxiety about possible breaches of privacy or surveillance ([Al-Dheleai & Tasir, 2015](#); [Aymerich-Franch & Fedeles, 2018](#)). These challenges point to the importance of careful planning and the establishment of clear guidelines to ensure that Facebook is integrated into teaching in a safe and effective manner.

While much of the existing literature focuses on students’ use of Facebook in language learning, there is comparatively little research on how teachers perceive and accept it as an instructional tool. Exploring teachers’ attitudes toward Facebook integration is crucial to understanding the motivational and behavioral factors that determine whether they choose to incorporate digital platforms into their teaching practice. The TAM, proposed by Davis (1989), offers a strong theoretical basis for such research, with its core constructs of perceived ease of use, perceived usefulness, satisfaction, attitude toward use, and intention to use. These constructs help explain why some teachers are more open to adopting educational technologies than others.

Although TAM has been widely applied in studies on technology adoption (e.g., [Do, 2023](#); [Scherer et al., 2019](#)), research focusing specifically on secondary school language teachers in Southeast Asia, especially in Vietnam, remains limited. Previous works have explored TAM in contexts such as mobile learning, e-learning platforms, and video conferencing tools like Zoom ([Alfadda & Mahdi, 2021](#)). Yet, comparative research on how teachers of different age groups accept Facebook for English instruction is still scarce. Insights into how teachers across age ranges perceive and use Facebook could inform professional development strategies and policy decisions.

In response to this gap, the present study applies TAM to investigate secondary school English teachers’ acceptance of Facebook in Ho Chi Minh City. It examines the interrelationships among the five

TAM constructs and explores whether age moderates these relationships. By identifying key predictors of behavioral intention and potential age-related patterns, this study seeks to contribute to the growing literature on integrating educational technology into language teaching.

2 Theoretical Framework of TAM

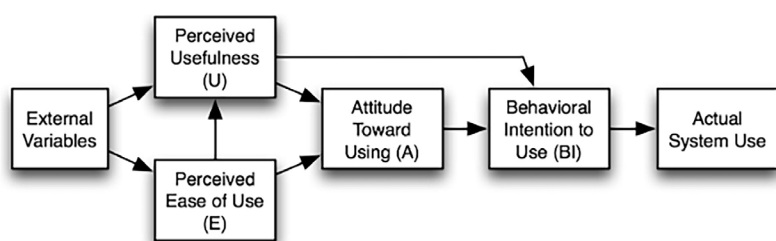
2.1 TAM model and technology in teaching and learning

Research on technology integration in education has been approached from multiple perspectives, including insights from educational psychology (Schunk, 2020) and studies on technology-enhanced learning environments (Ye, 2024). Of particular relevance is the model proposed by Yan and Carless (2021), which highlights the transformative role of ICTs in modernizing teaching methods and fostering more interactive forms of learning. Against this backdrop, this study highlights the need to integrate technology into teaching as an essential component of modern education.

The adoption of technology in educational settings is influenced by various factors, particularly users' attitudes (Argyris & Schon, 1992; OECD, 2013) and their motivation to use digital tools for learning and knowledge acquisition (Yan & Carless, 2021). As noted by Urhahne and Wijnia (2023), successful integration requires not only an awareness of technology's benefits but also encouragement and support from both institutional frameworks and wider social environments.

The TAM has become a widely used framework for explaining how individuals accept and use new technologies (Davis, 1989). It identifies five main constructs: perceived ease of use, perceived usefulness, attitude toward use, intention to use, and actual use (see Figure 1). These constructs reflect the cognitive and affective evaluations that guide an individual's decision to adopt a specific technology. In the present study, all five constructs were examined; however, "actual use" was not measured directly because of the cross-sectional nature of the research and its reliance on self-reported data.

Figure 1
TAM Model (adapted from Davis, 1989)



Recent research (e.g., Do, 2023; Scherer et al., 2019) has reaffirmed TAM's utility in educational contexts, particularly in predicting behavioral intentions toward adopting digital tools. However, while TAM provides a robust framework for identifying the antecedents of acceptance, it does not fully account for contextual or demographic variables that could moderate these relationships, such as age.

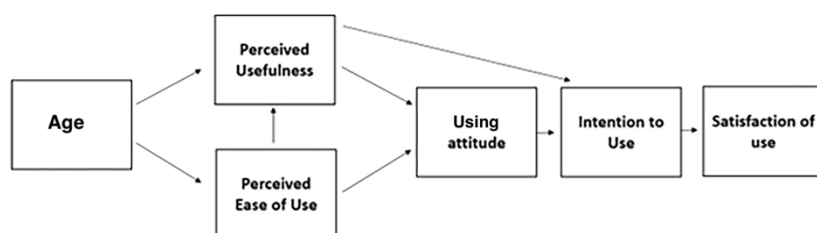
2.2 TAM model and age

Age is one of the most frequently examined external variables in TAM research, as it may influence both perception and behavioral intention. Zhang (2023) suggests that younger individuals often view technology as intuitive and engaging, while older users tend to focus on its practical utility. Similarly, Haleem et al. (2022) report that younger users are more likely to experiment with new tools, whereas older adults may require greater evidence of usefulness before adoption. On the other hand, studies such as Yap et al. (2022) find no significant differences across age groups in certain technology contexts.

Based on these conflicting findings, we hypothesize that age may moderate some TAM relationships in the context of Facebook adoption for instructional purposes (see Figure 2). This assumption aligns with Riskinanto et al. (2017), who found that age plays a moderate but significant role in shaping perceptions of digital tools. Therefore, this study compares two distinct teacher age groups to assess potential variations in acceptance of Facebook. This approach not only appears to reflect prior findings but also seeks to address a gap in TAM literature related to age differences among educators in Vietnam.

Figure 2

Adapted TAM Model with Age Variable



3 Research Model and Hypotheses

Based on the TAM model, this article proposes seven following hypotheses.

3.1 Perceived ease of use

Perceived ease of use refers to the extent to which teachers believe that integrating Facebook into English teaching at secondary schools is simple and enhances their teaching effectiveness. In the context of instructional technology, Zhou et al. (2024) defines perceived ease of use as teachers' confidence and belief that using social media as an educational tool could provide flexibility and ease in lesson delivery. Years later, e.g., Scherer et al. (2019) conducted a literature review on models related to technology adoption in education and suggested that the TAM remains the most widely used framework in this field. Their findings indicate that perceived ease of use and perceived usefulness may significantly influence teachers' willingness to integrate technology into their teaching practices.

Mensah (2024) notes that when teachers find technology easy to use, they are more likely to view it as effective in boosting student engagement and improving language learning outcomes. This observation is consistent with Nguyen et al. (2020), who identified seven key factors shaping educators' decisions to adopt digital tools in their teaching: technological self-efficacy, prior digital experience, perceived enjoyment, system characteristics, subjective norms, perceived ease of use, and perceived usefulness.

Research hypotheses:

- H1: Teachers who perceive Facebook as easy to use in English teaching are more likely to consider it useful, which in turn encourages them to incorporate it into their teaching. However, the extent of acceptance may still vary depending on individual circumstances.

- H2: Perceived ease of use of Facebook may also positively influence teachers' satisfaction with using it as a teaching tool, although this effect could differ depending on their prior experience and familiarity with digital teaching methods.

3.2 Perceived usefulness

Perceived usefulness refers to a teacher's belief that using a particular tool can enhance the effectiveness of their teaching (Yavich & Davidovitch, 2024). According to Rafique et al. (2024), both perceived

usefulness and perceived ease of use can strengthen teachers' motivation to integrate technology into their practice. However, Ibrahim and Shiring (2022) caution that the link between these two perceptions and the intention to adopt technology in teaching is not always straightforward. They emphasize that teachers' self-efficacy – their confidence in their ability to use technology effectively – may play a more decisive role.

In line with this perspective, Moorthy et al. (2019) found that self-efficacy can enhance teachers' perceived usefulness of Facebook in teaching. Self-efficacy is considered an external variable that determines the necessary skills and competencies to integrate technology into instructional practices. Similarly, Chugh et al. (2023) emphasized that system quality (interface, usability, etc.) is a critical factor influencing perceived usefulness when using technological platforms in education.

Research hypothesis:

- H3: The perceived usefulness of Facebook in English language teaching may positively affect teachers' satisfaction, encouraging them to integrate the platform into their teaching at varying levels.

3.3 Using attitude

Attitude reflects teachers' behavior and intention to continue using technology. Many studies have demonstrated the positive impact of perceived ease of use and perceived usefulness on users' attitudes (e.g., Davis, 1989; Liesa-Orús et al., 2023). However, uncertainty remains regarding the exact role of attitude in the TAM model, as Liao et al. (2022) suggest that the relationship between attitude and the final decision to adopt technology is incomplete.

Pan (2020) distinguishes between “the strength of attitude,” which can be either high or low, and emphasizes that this factor appears to influence motivation toward technology acceptance. If teachers have weak intentions to use technology, they may be reluctant to adopt new tools. Conversely, when teachers hold a positive attitude toward using Facebook in their teaching, they are generally less resistant to adopting it. Lu et al. (2020) point out a distinction between attitudes formed before and after adoption. In the early stages, teachers' attitudes are influenced by both perceived ease of use and perceived usefulness. Over time, however, these attitudes tend to be driven primarily by perceived usefulness.

Interactivity is another factor that plays an important role in shaping teachers' views on using Facebook. Liu et al. (2010) describe it as a key external variable in the TAM framework, noting its significant influence on attitude formation. Through social media platforms like Facebook, teachers can access resources more efficiently, tailor instruction to individual needs, and enhance communication with their students. García et al. (2024) further report that all TAM variables can have a positive impact on technology adoption in education, with perceived usefulness showing a direct link to attitude.

Research hypothesis:

H4: The perceived usefulness of Facebook positively influences teachers' attitudes toward using the platform in English language teaching.

3.4 Satisfaction of use

User satisfaction is linked to the extent to which teachers feel that Facebook meets their expectations in supporting English language instruction. Al-Adwan et al. (2023) suggested that ease of use plays a crucial role in guiding users toward adoption, as familiarity with a tool increases their likelihood of using it. However, other researchers argue that the relationship between satisfaction and actual use is not purely causal. Instead, they emphasize the stronger connection between attitude and technology adoption (e.g., Pan, 2020; Scherer, 2018).

Mendoza-Villafaina and López-Mosquera (2024) define educational satisfaction as the positive outcome that occurs when user expectations align with their overall evaluation of an experience. In

the context of educational technology, Saqr et al. (2024) highlight that user satisfaction is shaped by the effectiveness of a tool in meeting teaching objectives. Satisfaction is a perception – a response to the successful completion of an activity – which can be influenced by prior expectations. Rajeh et al. (2021) found that university instructors' satisfaction with digital teaching tools is directly related to their willingness to continue using them.

Research hypotheses:

H5: Teachers' satisfaction with using Facebook in English language instruction may positively influence their attitude toward integrating the platform into their teaching practices.

H6: Satisfaction with Facebook as a teaching tool could increase teachers' intention to continue using it in their classrooms.

3.5 Intention to use

Intention to use refers to a person's decision or commitment to engage in a particular behavior. Within the field of technology acceptance, the TAM model (Davis, 1989) explains the connections between perceived usefulness, perceived ease of use, attitude, and the intention to adopt a tool. Several studies indicate that teachers' intention to use educational technology is influenced by both their self-efficacy and their perception of ease of use. In other words, when teachers feel confident in operating a platform and find it straightforward to use, they are more likely to incorporate it into their practice (Hanham et al., 2021). Yao and Wang (2024) argue, however, that perceived usefulness may not have a direct effect on intention to use. This position contrasts with the findings of Nguyen et al. (2020), who observed that educators often adopt technology precisely because they believe it can improve teaching quality and support professional development.

Facebook has gained notable popularity among teachers as a teaching aid, yet doubts remain regarding its capacity to maintain long-term engagement and effectiveness in formal education. Using the TAM framework, Zhou et al. (2022) identified perceived usefulness and attitude as key predictors of a teacher's intention to continue using the platform.

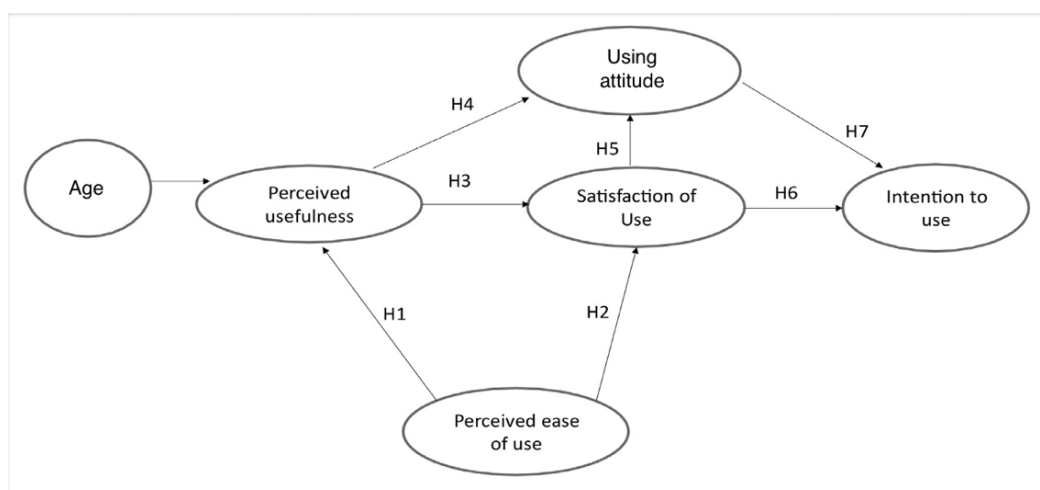
Research hypothesis:

H7: Teachers' positive attitude toward Facebook as a teaching tool may contribute to increasing their intention to use it for English language instruction.

A summary of all hypotheses is presented in Figure 3.

Figure 3

Research Model Based on TAM



4 Materials and Methods

4.1 Sample

In this study, a non-probabilistic sampling strategy was used, specifically convenience sampling. This method involves selecting participants who are most accessible to the researchers, offering practical advantages such as quick implementation, low cost, and suitability for exploratory studies (Hanif et al., 2018). The sample targeted secondary school English teachers in Ho Chi Minh City who already had experience using Facebook for instructional purposes.

Data were gathered via an online questionnaire sent to English teachers working in both public and private secondary schools. The survey link was initially provided to school principals, who then forwarded it to the English teachers within their schools. The data collection took place between October 15 and November 15, 2024. In total, 150 teachers participated, comprising 96 females and 54 males. Among them, 135 held a bachelor's degree and 15 held a master's degree.

For analysis, participants were divided into two age groups: 22–39 years old (Group A, $n = 81$) and 40 years and above (Group B, $n = 69$). This division was based on well-documented differences in professional experience and technological exposure between generations of teachers, with the age of 40 often cited as a threshold separating “digital natives” from “digital immigrants” (e.g., Riskinanto et al., 2017; Wang et al., 2013; Xie et al., 2023).

4.2 Questionnaire development

An interview with five English teachers (holding a master's degree in education or English teaching methodology) at secondary schools on the topic “The impact of Facebook on English teaching and learning” was conducted to collect preliminary data, which served as a basis for developing a broader survey questionnaire. The interview aimed to explore key factors of the TAM model, including perceived ease of use, perceived usefulness, satisfaction of use, using attitude, and intention to use. Open-ended questions were used to encourage teachers to share their insights. The interview session, which lasted about 60 minutes, focused on the main topics of interest. Responses from the interviews were compiled and synthesized to form the basis for designing the large-scale survey questionnaire.

To ensure clarity and relevance, the draft questionnaire was pre-tested with the same five teachers who had taken part in the interviews. Their feedback helped the researchers verify that the questionnaire's length was manageable, the wording of the questions was clear, the content was appropriate and logically organized, and that the instrument overall met acceptable standards of reliability and validity. Based on this review, several unsuitable items were removed.

To minimize the risk of common method bias, the study followed several recommended procedures (Podsakoff et al., 2003). A short introduction at the start of the survey assured participants of data confidentiality. The questionnaire was divided into sections, and items were randomly ordered within each section according to the content structure. After these measures, Harman's one-factor test was performed to assess common method bias. The results showed that a single factor accounted for 27.4% of the variance, indicating that significant bias was unlikely (Eichhorn, 2014).

4.3 Scales

All items were rated on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). Table 1 presents the number of items included in each scale.

Table 1

Questionnaire Items, Scales and Corresponding Bibliographical References.

Constructs	Items
Perceived ease of use	Using Facebook for English language teaching improves my teaching effectiveness and productivity.
	Using Facebook for English language teaching allows me to manage my teaching tasks more easily
	Using Facebook for English language teaching enhances the learning experience for my students
	Using Facebook for English language teaching is a useful tool in my teaching process
Perceived usefulness	I consider Facebook effective for English language teaching because: It helps maintain students' attention and engagement
	I consider Facebook effective for English language teaching because: It provides a flexible and accessible teaching environment
	I consider Facebook effective for English language teaching because: It allows me to set clear instructional objectives
	I consider Facebook effective for English language teaching because: It offers a variety of resources that support my teaching
	I consider Facebook effective for English language teaching because: It encourages communication and collaboration among students to enhance their learning experience
Satisfaction of use	Based on my experience of using Facebook for English teaching: I am very satisfied with it
	Based on my experience of using Facebook for English teaching: I find it engaging and beneficial for my teaching
	Based on my experience of using Facebook for English teaching: My experience using Facebook for teaching has exceeded my expectations
	Based on my overall experience of using Facebook for English teaching, I find it useful for my instruction
Using attitude	I set my teaching goals and plan lessons independently when using Facebook for English language teaching
	I organize my instructional activities according to my planning when integrating Facebook into my English classes
	I search for teaching resources and assign tasks independently when utilizing Facebook for English language instruction
Intention to use	I intend to continue using Facebook as a teaching tool for English language instruction
	I would prefer to keep using Facebook for teaching English over other digital platforms

4.4 Analysis

The study employed structural equation modeling (SEM) using AMOS software (version 23) (see Figure 4 and 5), a method that has gained significant prominence in recent educational research (e.g., [Alvarez-Jirón & Dicovski-Riobóo, 2022](#); [Samperio-Pacheco, 2019](#)). SEM allow for the examination of complex relationships between latent constructs and the assessment of the model's predictive capability. The constructs in this study were developed a priori based on a comprehensive literature review, which provided validated measurement items and theoretical justifications for their inclusion.

The analysis was conducted in three main stages: 1) Establishing hypothetical relationships among the constructs; 2) Performing confirmatory factor analysis to assess the reliability, convergent validity, and discriminant validity of the measurement model; 3) Computing the structural model to test the hypothesized paths and analyzing potential differences between age groups. This approach aimed to ensure a rigorous evaluation of both the measurement and structural components of the proposed model.

Figure 4
Model Results – Group A

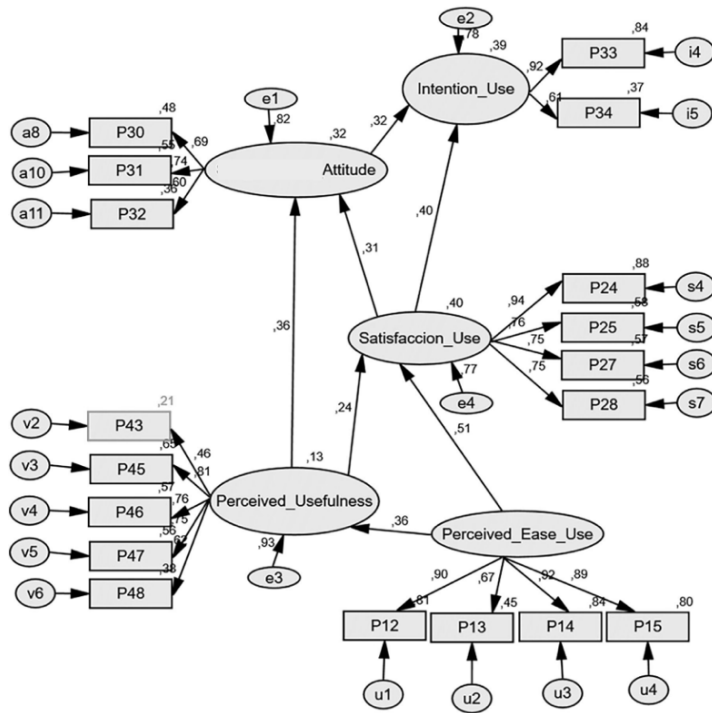
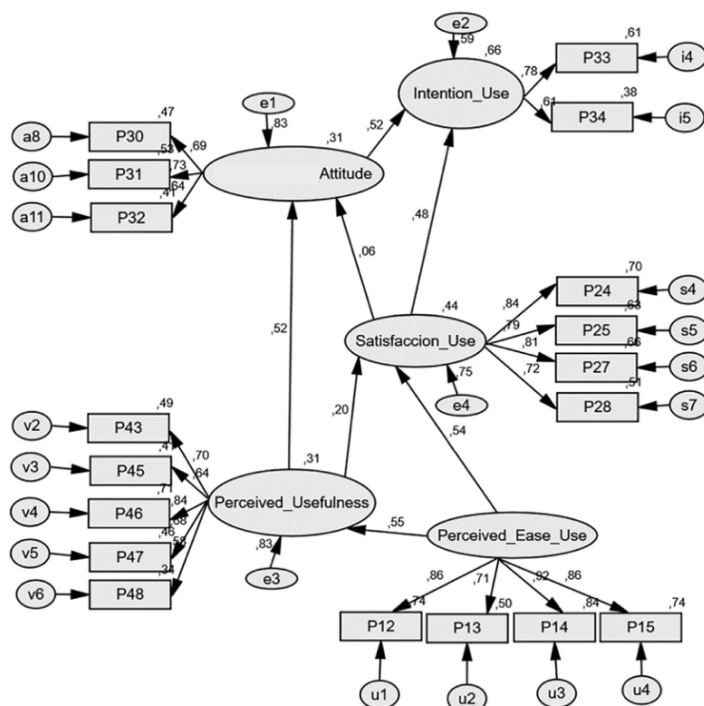


Figure 5
Model Results – Group B



5 Results

5.1 Model measurements

To begin, the reliability of the indicators was assessed by examining factor loadings, which represent the correlation between observed variables and their respective constructs (i.e., convergent validity). According to existing literature, a factor loading of at least 0,3 is considered acceptable, with some researchers identifying this as the minimum threshold (Cheung et al., 2024). This criterion appeared to be met in both the Group A and Group B models, with the lowest factor loading observed for item PU1 in the perceived usefulness construct within the Group A model (0,456). However, this value remains within the acceptable range established in statistical literature (see Tables 2 and 3). Additionally, the statistical significance of all factor loadings was verified, with all results found to be significant at $p < 0,001$.

Next, the internal consistency of each construct was evaluated using composite reliability. A reliability coefficient of 0,7 is widely regarded as the standard threshold (Taber, 2018). In this study, all constructs demonstrated acceptable reliability, as their values met or exceeded this benchmark (see Tables 2 and 3).

Furthermore, convergent validity was assessed using the Average Variance Extracted (AVE) metric. A recommended AVE value is typically 0,5, though values between 0,49 and 0,76 are also deemed acceptable (Henseler et al., 2016). In this study, all constructs appeared to meet this criterion, suggesting convergent validity (see Tables 2 and 3).

Lastly, discriminant validity was examined to determine whether each construct measured a unique concept distinct from the others. This was tested by ensuring that the AVE for each construct was greater than the squared correlations between that construct and all others (Fornell & Larcker, 1981). Since this condition was satisfied, discriminant validity was considered to be confirmed (see Tables 4 and 5).

Table 2
Observed Variables and Construct Reliability – Group A

Constructs	Items	Regression coefficients				Standardised regression coefficients	AVE	Composite reliability
		Estimate	S.E.	C.R.	p			
Perceived ease of use	PE1	0,94	0,05	18,34	***	0,897	0,7	0,9
	PE2	0,77	0,08	10,20	***	0,669		
	PE3	0,96	0,05	19,85	***	0,918		
	PE4	1,00				0,892		
Perceived usefulness	PU1	0,58	0,11	5,38	***	0,456	0,5	0,8
	PU2	1,00				0,807		
	PU3	0,84	0,10	8,82	***	0,757		
	PU4	0,92	0,09	9,83	***	0,748		
	PU5	0,74	0,10	7,26	***	0,615		
Satisfaction of use	SU1	1,00				0,940	0,6	0,9
	SU2	0,74	0,06	12,27	***	0,758		
	SU3	0,85	0,07	12,06	***	0,753		
	SU4	0,90	0,08	11,71	***	0,746		
Using attitude	UA1	1,16	0,19	6,10	***	0,694	0,5	0,7
	UA2	1,29	0,23	5,71	***	0,743		
	UA3	1,00				0,597		
Intention to use	IU1	1,37	0,26	5,34	***	0,918	0,6	0,7
	IU2	1,00				0,607		

*** $p < 0,001$

Table 3
Observed Variables and Construct Reliability – Group B

Constructs	Items	Regression coefficients				Standardised regression coefficients	AVE	Composite reliability
		Estimate	S.E.	C.R.	p			
Perceived ease of use	PE1	0,98	0,07	14,90	***	0,857	0,7	0,9
	PE2	0,87	0,08	10,43	***	0,710		
	PE3	1,09	0,06	17,67	***	0,917		
	PE4	1,00				0,863		
Perceived usefulness	PU1	1,23	0,18	6,99	***	0,703	0,5	0,8
	PU2	1,00				0,640		
	PU3	1,27	0,16	7,82	***	0,841		
	PU4	1,03	0,15	6,76	***	0,678		
	PU5	0,92	0,15	6,05	***	0,584		
Satisfaction of use	SU1	1,00				0,836	0,6	0,9
	SU2	0,87	0,08	10,82	***	0,792		
	SU3	1,07	0,10	10,82	***	0,812		
	SU4	0,90	0,10	9,07	***	0,717		
Using attitude	UA1	1,15	0,19	6,00	***	0,686	0,5	0,7
	UA2	1,07	0,17	6,33	***	0,727		
	UA3	1,00				0,640		
Intention to use	IU1	1,19	0,20	5,89	***	0,783	0,5	0,7
	IU2	1,00				0,614		

*** $p < 0,001$

Table 4
Discriminant Validity – Group A

Path	Perceived ease of use	Perceived usefulness	Satisfaction of use	Using attitude	Intention to use
Perceived ease of use	0,7				
Perceived usefulness	0,13	0,5			
Satisfaction of use	0,35	0,18	0,6		
Using attitude	0,10	0,24	0,21	0,5	
Intention to use	0,12	0,11	0,30	0,26	0,6

Table 5
Discriminant Validity – Group B

Path	Perceived ease of use	Perceived usefulness	Satisfaction of use	Using attitude	Intention to use
Perceived ease of use	0,7				
Perceived usefulness	0,31	0,50			
Satisfaction of use	0,42	0,24	0,6		
Using attitude	0,11	0,30	0,10	0,5	
Intention to use	0,23	0,27	0,41	0,45	0,5

5.2 Structural model

After evaluating the reliability of both indicators and constructs, the next step involved developing the models and assessing their fit with the observed data. This evaluation is considered crucial in SEM to determine how well the proposed model may represent the data. Since no single index can fully capture model fit, it is generally advisable to use multiple indices simultaneously. This approach aims to ensure a more comprehensive and precise assessment.

For this study, four commonly used fit indices provided by the AMOS statistical software were utilized: CMIN (chi-square minimum discrepancy) measures the discrepancy between actual and estimated covariances in the structural model. A lower CMIN value is typically interpreted as indicating a better model fit; CFI (comparative fit index) compares the proposed model against a baseline (null) model to evaluate incremental fit (values range from 0 to 1, with higher values generally signifying better fit; a CFI score above 0,95 is commonly considered acceptable); RMSEA (root mean square error of approximation) assesses how well the model fits the overall population by analyzing covariance alignment (a value below 0,06 suggests a strong fit); SRMR (standardized root mean square residual) examines the gap between actual and predicted correlations (values range from 0 to 1, with an SRMR score under 0,08 typically signifying a well-fitting model).

The findings suggest that the model's fit for both Group A and Group B appears to fall within the recommended thresholds (see Table 6).

Table 6
Model Fit

Measure	Estimates Group A	Estimates Group B	Threshold	Interpretation
DF	129	129	—	—
CMIN/DF	1,18	1,51	Between 1 & 3	Excellent
CFI	0,981	0,954	> 0,95	Excellent
SRMR	0,056	0,08	< 0,08	Excellent
RMSEA	0,035	0,056	< 0,06	Excellent
PClose	0,883	0,248	> 0,05	Excellent

5.3 Model results

Tables 7 and 8 present the model outcomes for both Group A and Group B, allowing for the evaluation of the first five hypotheses to assess whether they may be supported or refuted.

Table 7
Model Results – Group A

Path	Coefficients				Standardised coefficients
	Estimate	S.E.	C.R.	p	
Perceived usefulness ← Perceived ease of use	0,355	0,087	4097	***	0,358
Satisfaction of use ← Perceived ease of use	0,489	0,075	6543	***	0,509
Satisfaction of use ← Perceived usefulness	0,229	0,081	2837	0,005	0,236
Using attitude ← Perceived usefulness	0,205	0,064	3176	0,001	0,363
Using attitude ← Satisfaction of use	0,18	0,061	2942	0,003	0,309
Intention to use ← Satisfaction of use	0,336	0,1	3367	***	0,402
Intention to use ← Using attitude	0,462	0,165	2792	0,005	0,322

*** $p < 0,001$

Table 8
Model Results – Group B

Path	Coefficients				Standardised coefficients
	Estimate	S.E.	C.R.	p	
Perceived usefulness ← Perceived ease of use	0,394	0,072	5475	***	0,554
Satisfaction of use ← Perceived ease of use	0,463	0,086	5366	***	0,537
Satisfaction of use ← Perceived usefulness	0,237	0,12	1972	0,049	0,196
Using attitude ← Perceived usefulness	0,437	0,118	3715	***	0,522
Using attitude ← Satisfaction of use	0,043	0,077	0,552	0,581	0,062
Intention to use ← Satisfaction of use	0,441	0,112	3956	***	0,477
Intention to use ← Using attitude	0,696	0,169	4,12	***	0,52

*** $p < 0,001$

5.4 Results of the multi-group analysis

To examine potential differences in the relationships between constructs across the two segments, a comparison was conducted to explore whether any significant variations might be present. A multi-group analysis was performed using the Amos statistical software, and the findings are presented in Table 9.

Table 9
Multigroup Analysis

Path	Group A	Group B	Betas difference	p-value for the difference	Interpretation
Perceived ease of use → Perceived usefulness.	0,358***	0,554***	-0,196	1000	There's no difference
Perceived ease of use → Satisfaction of use.	0,509***	0,537***	-0,028	1000	There's no difference
Perceived usefulness → Satisfaction of use.	0,236**	0,196*	0,041	1000	There's no difference
Perceived usefulness → Using attitude.	0,363**	0,522***	-0,159	1000	There's no difference
Satisfaction of use → Using attitude.	0,309**	0,062	0,247	1000	The positive relationship between Using attitude and Satisfaction appears to be significant only for Group A.
Satisfaction of use → Intention to use.	0,402***	0,477***	-0,074	1000	There's no difference
Using attitude → Intention to use.	0,322**	0,520***	-0,198	1000	There's no difference

$p < 0,100$ * $p < 0,050$ ** $p < 0,010$ ***.

6 Discussion

6.1 Summary of key findings

This study applied the TAM framework to explore factors influencing the behavioral intention of secondary school English teachers to use Facebook as an instructional tool, with a focus on the mediating and moderating relationships among its core constructs. The analysis confirmed all seven proposed hypotheses, revealing significant relationships between the five main TAM components: perceived ease of use, perceived usefulness, satisfaction, attitude toward use, and intention to use.

6.2 Comparison with previous research

The findings are consistent with earlier research (e.g., [Davis, 1989](#); [Scherer et al., 2019](#)), showing that perceived ease of use significantly affects both perceived usefulness and satisfaction. This highlights usability as a continuing and influential predictor of technology acceptance in educational contexts. Teachers who found Facebook straightforward to use were more inclined to view it as both beneficial and satisfying for teaching purposes. This pattern mirrors the observations of [Do \(2023\)](#), who emphasized the importance of simplicity and digital fluency in technology adoption among Vietnamese educators.

The study also reinforced the role of perceived usefulness in shaping satisfaction and attitude, echoing the conclusions of [Moorthy et al. \(2019\)](#) and [Rafique et al. \(2024\)](#). Teachers who saw Facebook as an effective means of engaging students and providing flexible learning opportunities tended to develop a more favorable attitude toward its integration into their teaching. Furthermore, satisfaction emerged as a strong mediator between perceived usefulness and intention to use, highlighting the potential importance of emotional responses and teaching experience, as proposed by [Mendoza-Villafaina & López-Mosquera \(2024\)](#) and [Rajeh et al. \(2021\)](#).

6.3 Theoretical contributions

By centering on teacher-oriented constructs, this study contributes to the limited but growing body of research that emphasizes educators' psychological readiness and affective engagement in technology-enhanced language teaching. Notably, the study extends existing TAM-based research by incorporating age as a moderating variable, which remains relatively underexplored in educational technology literature. The multigroup analysis suggested that, while younger and older teachers both acknowledged the benefits of Facebook, the relationship between satisfaction and attitude was only significant among the younger group (22–39 years). This finding partially supports prior research by e.g., [Riskinanto et al., 2017](#); [Zhang, 2023](#), who suggest that younger users may be more responsive to affective and experiential factors when adopting digital tools. In contrast, older teachers (40+) demonstrated more stable behavioral intentions, largely shaped by their perceived usefulness rather than emotional satisfaction, mirroring the insights of [Haleem et al. \(2022\)](#).

6.4 Practical implications

In comparison with studies on Facebook integration in language education (e.g., [Barrot, 2018](#); [Blattner & Fiori, 2009](#)), this research confirms the platform's potential to enhance learner engagement and communication. However, it adds value by foregrounding teachers' motivational orientations and demographic characteristics – dimensions often overlooked in student-focused technology adoption studies. While earlier studies primarily focused on student outcomes, this study provides preliminary evidence that teacher satisfaction and attitude may be equally critical in technology adoption.

Several practical implications emerge from the findings. First, professional development programs may need to be tailored to teachers' age and digital experience to enhance satisfaction and support long-term adoption. Second, policy interventions should address both technical ease and pedagogical relevance to foster positive attitudes among educators.

6.5 Limitations and future research

However, certain limitations must be acknowledged. The sample size, though sufficient for exploratory SEM, remains relatively small and limited to one urban area. Future research could expand to include a more diverse and representative population. Another important consideration is the potential discrepancy between self-reported attitudes and actual classroom practices – a well-documented concern in educational research (Pan, 2020). Teachers may express positive views about Facebook integration without consistently applying it in real teaching scenarios. Longitudinal studies are recommended to track how behavioral intentions evolve over time and across instructional settings, thereby validating the predictive power of TAM in authentic pedagogical environments.

7 Conclusion

This study applied the TAM to investigate secondary school English teachers' acceptance of Facebook as an instructional tool in Ho Chi Minh City. By examining five core constructs (perceived ease of use, perceived usefulness, satisfaction, attitude, and intention to use), the research aims to offer empirical insights into the motivational and behavioral factors that may shape technology adoption in education.

The findings suggest that all hypothesized relationships within the TAM framework were statistically significant. Perceived ease of use and perceived usefulness appeared to emerge as key antecedents of teacher satisfaction and positive attitude, which in turn may influence their intention to use Facebook in the classroom. Age differences also seemed to play a role: younger teachers demonstrated a stronger link between satisfaction and attitude, suggesting greater responsiveness to affective experiences in the adoption process.

This study contributes to the existing body of TAM research by contextualizing the model in a Vietnamese secondary school setting and by highlighting the moderating role of age, a factor that remains relatively underrepresented in prior studies. It also shifts the focus from student-centered to teacher-centered perspectives on social media integration, emphasizing the potential importance of emotional satisfaction and contextual readiness in driving acceptance.

Several practical implications emerge, including the need for age-sensitive training programs, supportive policies, and adaptive digital pedagogies (Wu & Zhang, 2024). Future research should consider adopting longitudinal designs and incorporating observational methods to assess how teachers' stated attitudes may translate into sustained classroom practices. Addressing the gap between intention and actual use remains an important direction for further exploration.

Generative AI statement

The authors used QuillBot to enhance the work's language and eliminate semantic errors. Following the use of this AI tool, the authors thoroughly reviewed, edited, and verified the final version of their work. The authors take full responsibility for the content of this publication.

References

- Al-Adwan, A. S., Li, N., Al-Adwan, A., Abbasi, G. A., Abbelbisi, N. A., & Habibi, A. (2023). Extending the technology acceptance model (TAM) to predict university students' intentions to use metaverse-based learning platforms. *Education and Information Technologies*, 28, 15381–15413. <https://doi.org/10.1007/s10639-023-11816-3>.
- Al-Dheleai, Y. M., & Tasir, Z. (2015). Facebook and education: Students' privacy concerns. *International Education Studies*, 8(13), 22–26. <https://doi.org/10.5539/ies.v8n13p22>.
- Alfadda, H. A., & Mahdi, H. S. (2021). Measuring students' use of Zoom application in language course based on the technology acceptance model (TAM). *Journal of Psycholinguistic Research*, 50(4), 883–900. <https://doi.org/10.1007/s10936-020-09752-1>.
- Alvarez-Jirón, D. M. ., & Dicovski-Riobóo, L. M. (2022). Modelos de ecuaciones estructurales (SEM) y su aplicación en la educación. *Revista Ciencia Y Tecnología El Higo*, 12(1), 28–41. <https://doi.org/10.5377/elhigo.v12i1.14524>.
- Argyris, C., & Schön, D. A. (1992). *Theory in practice: Increasing professional effectiveness*. Jossey-Bass.
- Aymerich-Franch, L., & Fedele, M. (2018). Students' privacy concerns on the use of social media in higher education. In Information Resources Management Association (Ed.), *Social media in education: Breakthroughs in research and practice* (pp. 128–151). IGI Global. <https://doi.org/10.4018/978-1-5225-5652-7.ch008>
- Barrot, J. S. (2018). Facebook as a learning environment for language teaching and learning: A critical analysis of the literature from 2010 to 2017. *Journal of Computer Assisted Learning*, 34, 863–875. <https://doi.org/10.1111/jcal.12295>.
- Blattner, G., & Fiori, M. (2009). Facebook in the language classroom: Promises and possibilities. *International Journal of Instructional Technology and Distance Learning*, 6(1), 17–28.
- Cheung, G. W., Cooper-Thomas, H. D., Lau, R. S., & Wang, L. C. (2024). Reporting reliability, convergent and discriminant validity with structural equation modeling: A review and best-practice recommendations. *Asia Pacific Journal of Management*, 41, 745–783. <https://doi.org/10.1007/s10490-023-09871-y>.
- Chugh, M., Upadhyay, R., & Chugh, N. (2023). An empirical investigation of critical factors affecting acceptance of e-learning platforms: A learner's perspective. *SN Computer Science*, 4, 240. <https://doi.org/10.1007/s42979-022-01558-3>.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>.
- Do, T. N. Q. (2023). Factors affecting the acceptance of e-learning by learners in the context of the Covid-19 pandemic: A hybrid artificial neural network - SEM method. *Vietnam Journal of Education*, 7(1), 48–62. <https://doi.org/10.52296/vje.2023.255>.
- Eichhorn, B. R. (2014). *Common method variance techniques*. SAS Institute.
- Faryadi, Q. (2017). Effectiveness of Facebook in English language learning: A case study. *Open Access Library Journal*, 4, 1–11. <https://doi.org/10.4236/oalib.1104017>.
- Feng, S., Wong, Y. K., Wong, L. Y., & Hossain, L. (2019). The internet and Facebook usage on academic distraction of college students. *Computers & Education*, 134, 41–49. <https://doi.org/10.1016/j.compedu.2019.02.005>.
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.1177/002224378101800313>.

- García, J., Gómez, C., López, A., & Schlosser, M. (2024). Applying the technology acceptance model to online self-learning: A multigroup analysis. *Journal of Innovation & Knowledge*, 9(4), 100571. <https://doi.org/10.1016/j.jik.2024.100571>.
- Haleem, P. A., Javaid, D. M., Qadri, P. M., & Suman, D. R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, 3, 275–285. <https://doi.org/10.1016/j.susoc.2022.05.004>.
- Hanham, J., Lee, C. B., & Teo, T. (2021). The influence of technology acceptance, academic self-efficacy, and gender on academic achievement through online tutoring. *Computers & Education*, 172, 104252. <https://doi.org/10.1016/j.compedu.2021.104252>.
- Hanif, M., Shahbaz, M. Q., & Ahmad, M. (2018). *Sampling techniques: Methods and applications*. NOVA Publisher.
- Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: Updated guidelines. *Industrial Management & Data Systems*, 116(1), 2–20. <https://doi.org/10.1108/IMDS-09-2015-0382>.
- Ibrahim, A., & Shiring, E. (2022). The relationship between educators' attitudes, perceived usefulness, and perceived ease of use of instructional and web-based technologies: Implications from technology acceptance model (TAM). *International Journal of Technology in Education*, 5(4), 535–551. <https://doi.org/10.46328/ijte.285>.
- Jumaat, N. F., Ahmad, N., Samah, N. A., Ashari, Z. M., Ali, D. F., & Abdullah, A. H. (2019). Facebook as a platform of social interactions for meaningful learning. *International Journal of Emerging Technologies in Learning*, 14(4), 151–159. <https://doi.org/10.3991/ijet.v14i04.9363>.
- Kabilan, M. K., Ahmad, N., & Abidin, M. J. Z. (2010). Facebook: An online environment for learning English in institutions of higher education? *The Internet and Higher Education*, 13(4), 179–187.
- Liao, Y. K., Wu, W. Y., Le, T. Q., & Phung, T. T. T. (2022). The integration of the technology acceptance model and value-based adoption model to study the adoption of e-learning: The moderating role of e-WOM. *Sustainability*, 14(2), 815. <https://doi.org/10.3390/su14020815>.
- Liesa-Orús, M., Latorre-Coscolluela, C., Sierra-Sánchez, V., & Vázquez-Toledo, S. (2023). Links between ease of use, perceived usefulness and attitudes towards technology in older people in university: A structural equation modelling approach. *Education and Information Technologies*, 28(3), 2419–2436. <https://doi.org/10.1007/s10639-022-11292-1>.
- Lim, F. V. (2025). The future of TESOL with multimodality. *International Journal of TESOL Studies*, 7 (2), 76–85. <https://doi.org/10.58304/ijts.241213>
- Liu, I., Chen, M. C., Sun, Y. S., Wible, D., & Kuo, C. (2010). Extending the TAM model to explore the factors that affect intention to use an online learning community. *Computers & Education*, 54, 600–610. <https://doi.org/10.1016/j.compedu.2009.09.009>.
- Lu, Z., Cui, T., Tong, Y., & Wang, W. (2020). Examining the effects of social influence in pre-adoption phase and initial post-adoption phase in the healthcare context. *Information & Management*, 57(3), 103195. <https://doi.org/10.1016/j.im.2019.103195>.
- Manca, S., & Ranieri, M. (2016). Facebook and the others: Potentials and obstacles of social media for teaching in higher education. *Computers & Education*, 95, 216–230. <https://doi.org/10.1016/j.compedu.2016.01.012>.
- Mendoza-Villafaina, J., & López-Mosquera, N. (2024). Educational experience, university satisfaction and institutional reputation: Implications for university sustainability. *The International Journal of Management Education*, 22(3), 101013. <https://doi.org/10.1016/j.ijme.2024.101013>.
- Mensah, M. S., Arthur, K. N., & Mensah-Williams, E. (2024). Antecedents of e-learning in undergraduate entrepreneurship education. *E-Learning and Digital Media*, 21(5), 496–516. <https://doi.org/10.1177/20427530231167642>.

- Moorthy, K., T'ing, L. C., Wei, K. M., Zi Mei, P. T., Yee, C. Y., Jia Wern, K. L., & Xin, Y. M. (2019). Is Facebook useful for learning? A study in private universities in Malaysia. *Computers & Education*, 130, 94–104. <https://doi.org/10.1016/j.compedu.2018.12.002>.
- Muftah, M. (2022). Impact of social media on learning English language during the COVID-19 pandemic. *PSU Research Review*, 8(1), 211–226. <https://doi.org/10.1108/PRR-10-2021-0060>.
- Nguyen, H., Pham, H., Vu, N., & Hoang, H. (2020). Factors influencing students' intention to use e-learning system: A case study conducted in Vietnam. *International Journal of Emerging Technologies in Learning*, 15(18), 165–182. <https://doi.org/10.3991/ijet.v15i18.15441>.
- OECD. (2013). *Leadership for 21st century learning: Educational research and innovation*. OECD Publishing. <https://doi.org/10.1787/9789264205406-en>.
- Pan, X. (2020). Technology acceptance, technological self-efficacy, and attitude toward technology-based self-directed learning: Learning motivation as a mediator. *Frontiers in Psychology*, 11, 564294. <https://doi.org/10.3389/fpsyg.2020.564294>.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>.
- Rabongue, S., Patadlas, R., Marilla, J., & Emmylou, E. (2024). Leveraging social media for language acquisition: Exploring how high school students use Facebook for English language learning (ELL). *International Journal of Science and Management Studies*, 7(4), 185–191. <https://doi.org/10.51386/25815946/ijsms-v7i4p124>.
- Rafique, S., Salsabeel, W., & Javed, I. (2024). Teachers' perceived ease of use and perceived usefulness of technology at higher education level. *Journal of Asian Development Studies*, 13(4), 427–436. <https://doi.org/10.62345/jads.2024.13.4.35>.
- Rajeh, M. T., Abduljabbar, F. H., Alqahtani, S. M., Waly, F. J., Alnaami, I., Aljurayyan, A., & Alzaman, N. (2021). Students' satisfaction and continued intention toward e-learning: A theory-based study. *Medical Education Online*, 26(1), 1961348. <https://doi.org/10.1080/10872981.2021.1961348>.
- Riskianto, A., Kelana, B., & Hilmawan, D. R. (2017). The moderation effect of age on adopting e-payment technology. *Procedia Computer Science*, 124, 536–543. <https://doi.org/10.1016/j.procs.2017.12.187>.
- Rodliyah, R. S. (2016). Using a Facebook closed group to improve EFL students' writing. *TEFLIN Journal*, 27(1), 82–100. <https://doi.org/10.15639/teflinjournal.v27i1/82-100>.
- Samperio-Pacheco, V. M. (2019). Ecuaciones estructurales en los modelos educativos: Características y fases en su construcción. *Apertura (Guadalajara, Jal.)*, 11(1), 90–103. <https://doi.org/10.32870/ap.v11n1.1402>.
- Saqr, R. R., Al-Somali, S. A., & Sarhan, M. Y. (2024). Exploring the acceptance and user satisfaction of AI-driven e-learning platforms (Blackboard, Moodle, Edmodo, Coursera and edX): An integrated technology model. *Sustainability*, 16(1), 204. <https://doi.org/10.3390/su16010204>.
- Scherer, R., Siddiq, F., & Tondeur, J. (2019). The technology acceptance model (TAM): A meta-analytic structural equation modeling approach to explaining teachers' adoption of digital technology in education. *Computers & Education*, 128, 13–35. <https://doi.org/10.1016/j.compedu.2018.09.009>.
- Scherer, R., Tondeur, J., Siddiq, F., & Baran, E. (2018). The importance of attitudes toward technology for pre-service teachers' technological, pedagogical, and content knowledge: Comparing structural equation modeling approaches. *Computers in Human Behavior*, 80, 67–80. <https://doi.org/10.1016/j.chb.2017.11.003>.
- Schunk, D. H. (2020). *Learning theories: Educational perspectives*. Pearson.
- Statista. (2023). *Number of Facebook users worldwide from 2015 to 2023*. <https://www.statista.com>.

- Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, 48, 1273–1296. <https://doi.org/10.1007/s11165-016-9602-2>.
- Urhahne, D., & Wijnia, L. (2023). Theories of motivation in education: An integrative framework. *Educational Psychology Review*, 35, 45. <https://doi.org/10.1007/s10648-023-09767-9>.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press. <https://doi.org/10.2307/j.ctvjf9vz4>.
- Wang, Q., Myers, M. D., & Sundaram, D. (2013). Digital Natives and Digital Immigrants. *Business & Information Systems Engineering*, 5, 409–419. <https://doi.org/10.1007/s12599-013-0296-y>.
- Wu, J. G., & Zhang, D. (2024). Chasing butterflies? Experiences and challenges of being and becoming a TELL researcher against the digital applied linguistic context. *Digital Applied Linguistics*, 1, 2296. <https://doi.org/10.29140/dal.v1.2296>.
- Xie, Y., Boudouaia, A., Xu, J., AL-Qadri, A. H., Khattala, A., Li, Y., & Aung, Y. M. (2023). A Study on Teachers' Continuance Intention to Use Technology in English Instruction in Western China Junior Secondary Schools. *Sustainability*, 15(5), 4307. <https://doi.org/10.3390/su15054307>.
- Yan, Z., & Carless, D. (2021). Self-assessment is about more than self: The enabling role of feedback literacy. *Assessment & Evaluation in Higher Education*, 47(7), 1116–1128. <https://doi.org/10.1080/02602938.2021.2001431>.
- Yao, N., & Wang, Q. (2024). Factors influencing pre-service special education teachers' intention toward AI in education: Digital literacy, teacher self-efficacy, perceived ease of use, and perceived usefulness. *Heliyon*, 10(14), e34894. <https://doi.org/10.1016/j.heliyon.2024.e34894>.
- Yap, Y. Y., Tan, S. H., & Choon, S. W. (2022). Elderly's intention to use technologies: A systematic literature review. *Heliyon*, 8(1), e08765. <https://doi.org/10.1016/j.heliyon.2022.e08765>.
- Yavich, R., & Davidovitch, N. (2024). What affects teachers' use of technology: Teachers' beliefs regarding technology, teachers' technological skills, or available sources of support? *Education Sciences*, 14(12), 1339. <https://doi.org/10.3390/educsci14121339>.
- Ye, X. (2024). A review of classroom environment on student engagement in English as a foreign language learning. *Frontier in Education*, 9, 1415829. <https://doi.org/10.3389/feduc.2024.1415829>.
- Yunus, M. M., Salehi, H., & Chenzi, C. (2012). Integrating social networking tools into ESL writing classroom: Strengths and weaknesses. *English Language Teaching*, 5(8), 42–48. <https://doi.org/10.5539/elt.v5n8p42>.
- Zhang, M. (2023). Older people's attitudes towards emerging technologies: A systematic literature review. *Public Understanding of Science*, 32(8), 948–968. <https://doi.org/10.1177/09636625231171677>.
- Zhou, J., Huang, T., & Chen, S. (2024). Pre-service teachers' changing beliefs in a digital humanity course: Three cases of ELT teachers. *Digital Applied Linguistics*, 1, 2258. <https://doi.org/10.29140/dal.v1.2258>.
- Zhou, L., Xue, S., & Li, R. (2022). Extending the technology acceptance model to explore students' intention to use an online education platform at a university in China. *Sage Open*, 12(1). <https://doi.org/10.1177/21582440221085259>.

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